SERVICE INFORMATION

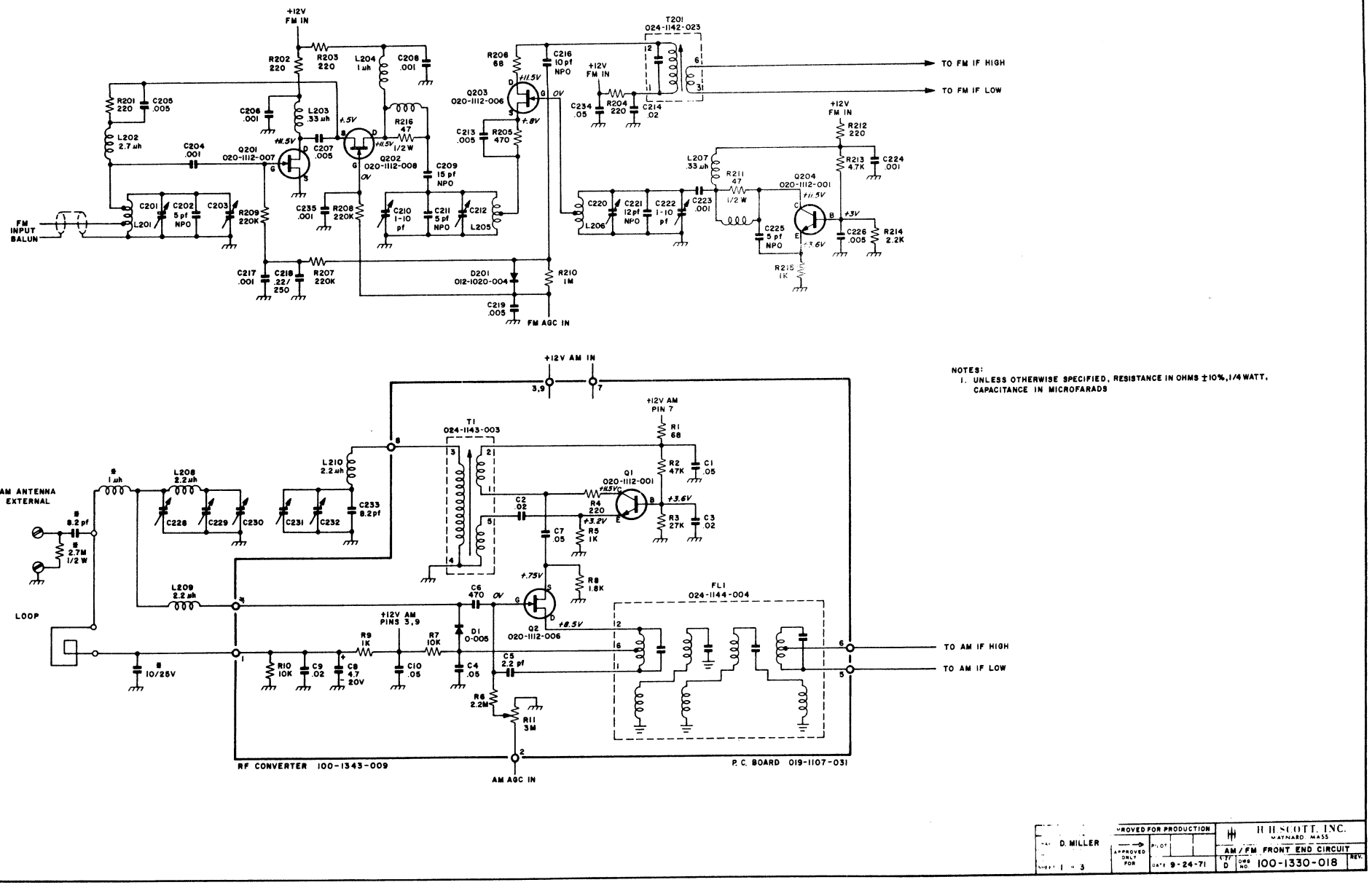
for

431

SCOTT®

where innovation is a tradition

H. H. Scott, Inc., 111 Powdermill Road, Maynard, Mass. 01754



NOTES:
1. UNLESS OTHERWISE SPECIFIED, RESISTANCE IN OHMS ±10%, 1/4 WATT, CAPACITANCE IN MICROFARADS

REVISIONS

SYM	DESCRIPTION	DATE	APPD

D. MILLER

SHEET 1 OF 3

APPROVED FOR PRODUCTION

APPROVED ONLY FOR

PILOT

DATE 9-24-71

H H SCOTT, INC.
MAYNARD, MASS

AM/FM FRONT END CIRCUIT

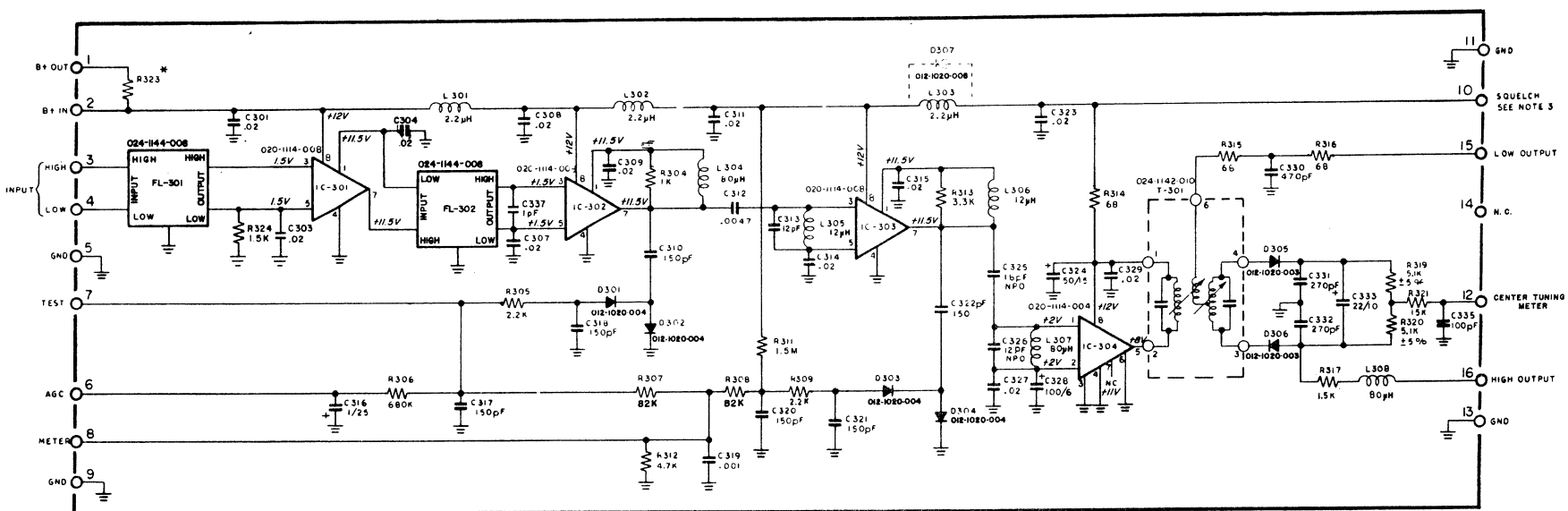
SIZE D

DWG NO. 100-1330-018

REV.

CIRCUIT OF 020-1114-008 TO BE PRINTED IN THIS AREA WHEN IF CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 020-1114-008

CIRCUIT OF 020-1114-004 TO BE PRINTED IN THIS AREA WHEN IF CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 020-1114-004



DUAL FILTER IF 100-1331-030

PC BOARD 019-1107-081

NOTES

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE IN OHMS ±10%, 1/4 WATT. CAPACITANCE IN MICROFARADS
2. HIGHEST SERIES R324, C337, D307, L308, IC-304, T-301, FL-302.
3. USE D307 IN PLACE OF L303 FOR SQUELCH, PIN 10.
4. * USE RESISTOR R323 WHEN SUPPLYING FRONT END FROM B+.
5. **COMPONENTS DELETED, R301, R302, R303, R310, R318, R322, C302, C305, C306, C334, C336**

CIRCUIT OF 6-POLE FILTER TO BE PRINTED IN THIS AREA WHEN IF CIRCUIT APPEARS IN THE SERVICE MANUAL SEE 024-1144-008.

REFER TO COMPONENT LABEL 019-1107-081/A

USED ON E230(431)

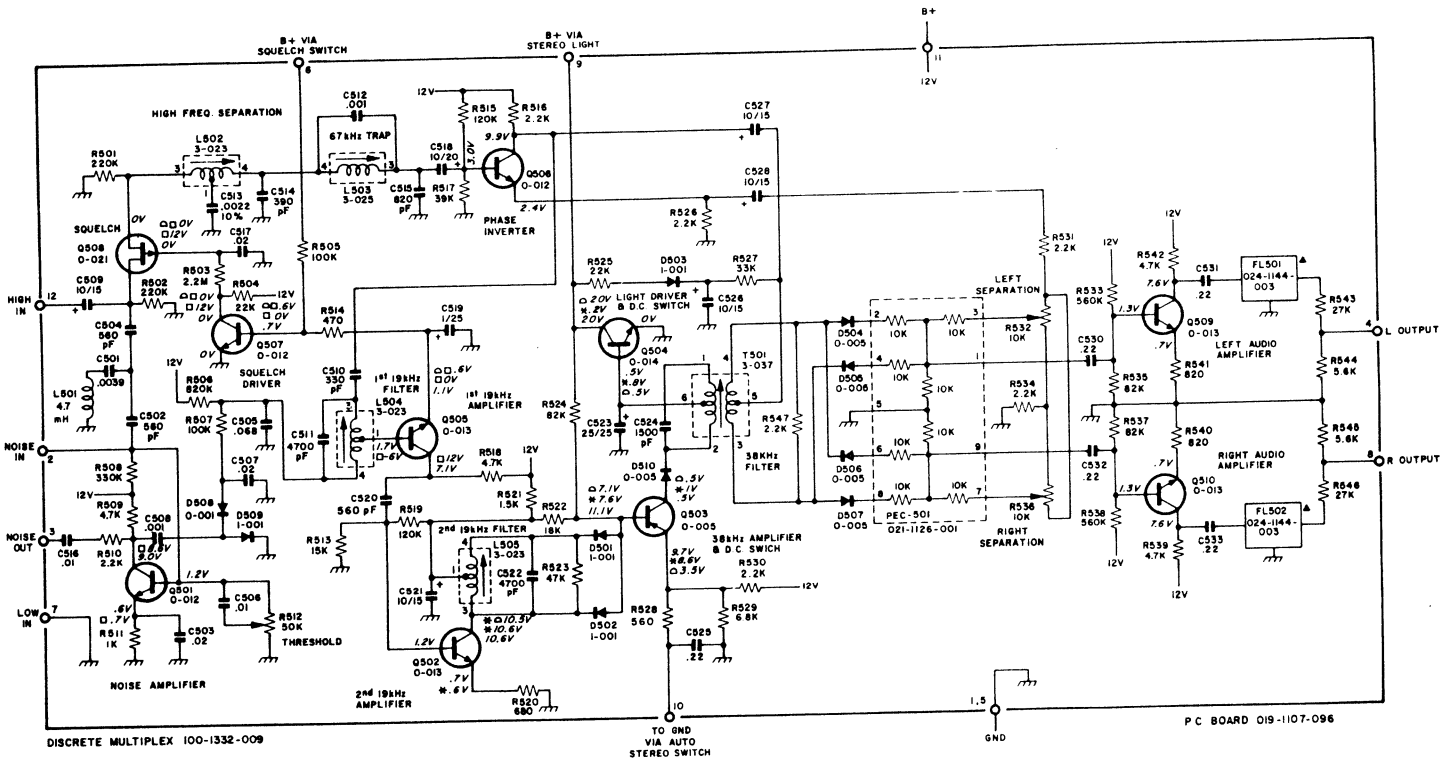
H.H.SCOTT, INC. MAYNARD, MASS.

DUAL FILTER IF

SIZE D | DWG. NO. 100-1331-030 | REV. O

DWG. | SHEET 1 OF 1 | DATE 10-26-71

REVISIONS			
SYM	DESCRIPTION	DATE	APPD
1	ECO 3696	7 29 71	
2	ECO 3775	8 31 71	
3	ECO 3846	11-30-71	

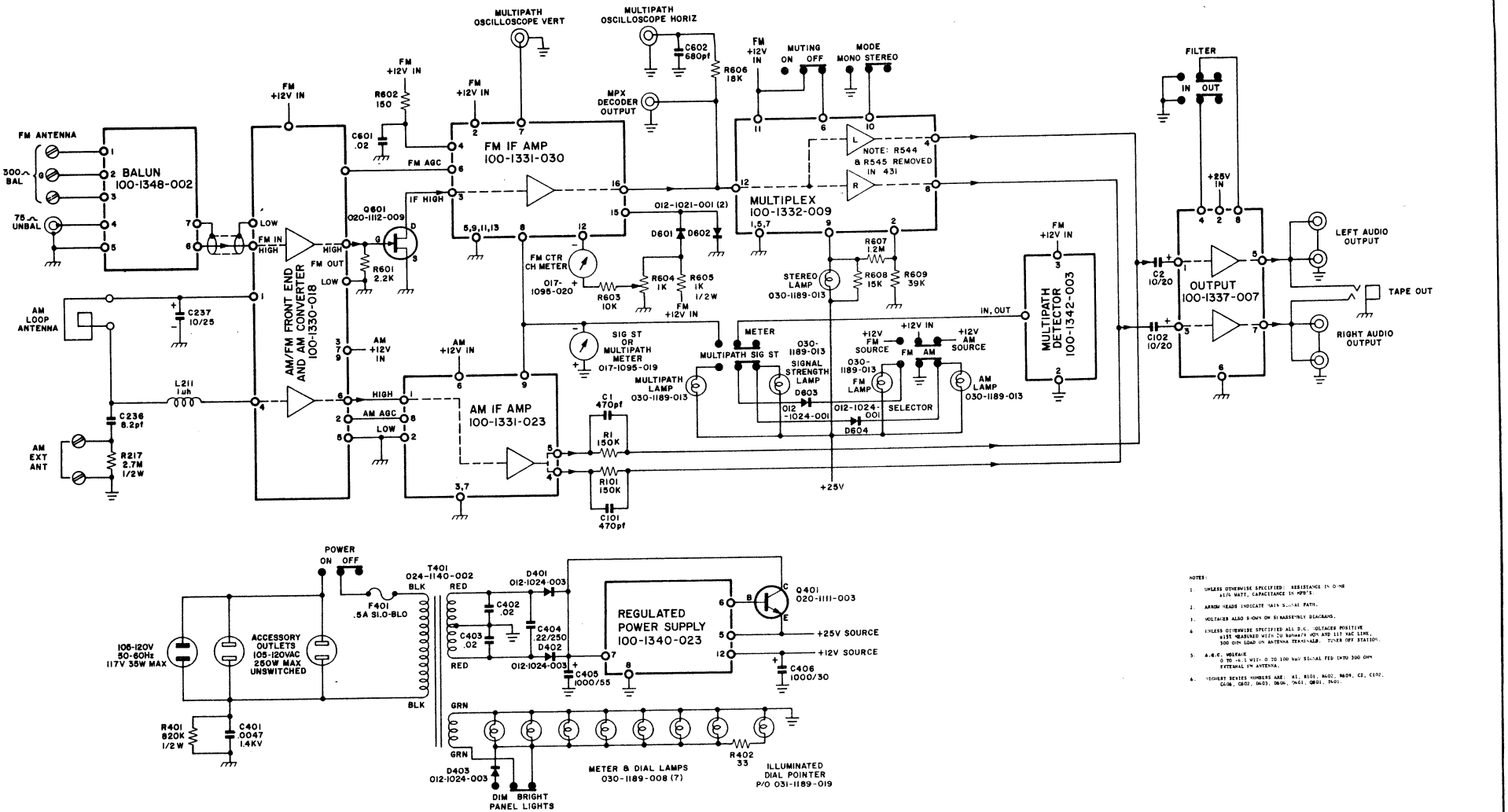


NOTES:

1. UNLESS OTHERWISE SPECIFIED; RESISTANCE IN OHMS ±10% 1/6 WATT, CAPACITANCE IN MFD'S.
2. ALL D.C. VOLTAGES (±15%) MEASURED WITH RESPECT TO CHASSIS GROUND, USING V.T.V.M. AT 117 VAC LINE, AND FM MONO SIGNAL FED INTO THE DEMODULATOR. SQUELCH AND AUTO-STEREO SWITCHES OPEN.
   - * FM STEREO SIGNAL FED TO DEMODULATOR.
   - □ OFF-STATION NOISE FED TO DEMODULATOR.
   - ○ SQUELCH AND AUTO-STEREO SWITCHES OPEN.
3. ▲ 024-1144-007 FILTER (FL803) MAY BE SUBSTITUTED FOR THE TWO 024-1144-003 FILTERS (FL-501, FL-502).
4. ALL L, T, D, AND Q NUMBERS ARE SHOWN BY THE LAST FOUR NUMBERS OF THEIR TEN DIGIT PART NUMBER. PREFIX FOR EACH AS FOLLOWS: L&T ARE 018-1093-····, D IS 012-1021-·, Q IS 020-1110-····.
5. HIGHEST SERIES NUMBERS ARE; R547, C534, D510, Q510, L505, T501, FL502, PEC-501
6. COMPONENT NUMBERS DELETED: C529, C534.
7. R547 TO BE SOLDERED TO BOTTOM SIDE OF BOARD BETWEEN PIN 3 AND PIN 4 OF T501 AS INDICATED.

CIRCUIT OF 024-1144-003 TO BE PRINTED IN THIS AREA WHEN MULTIPLEX CIRCUIT APPEARS IN THE SERVICE MANUAL
SEE 024-1144-003

11/15/71 R2	1205 APPROVED FOR PRODUCTION	H.H.SCOTT, INC. MAYNARD, MASS.	
DRAFT T.F.M	APPROVED DWLY PDR	PILOT R 9/12/71	DISCRETE MULTIPLEX CIRCUIT
CH J.C.		DATE 8-26-70	SIZE D DWG NO. 100-1332-009 REV. -
SHEET 1 OF 1			



NOTES:

1. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS ±10% WATT, CAPACITANCE IN MFD'S.
2. ARROW HEADS INDICATE MAIN SIGNAL PATH.
3. VOLTAGES ALSO SHOWN ON SUBASSEMBLY DIAGRAMS.
4. UNLESS OTHERWISE SPECIFIED ALL D.C. VOLTAGES POSITIVE AND MEASURED WITH 20 kohms/V VOM AND 117 VAC LINE, 300 OHM LOAD ON ANTENNA TERMINALS. TUNED OFF STATION.
5. A.C.C. VOLTAGE 0 TO -4.5 VDC WITH 0 TO 100 MuV SIGNAL FED INTO 300 OHM EXTERNAL FM ANTENNA.
6. HIGHEST SERIES NUMBERS ARE: R1, R101, R402, R609, C1, C102, C406, C602, D403, D604, J401, Q401, P401.

REVISIONS			
SYM	DESCRIPTION	DATE	APPR

NOT APPROVED FOR PRODUCTION

DRAFT D. MILLER

CH

SHEET 1 OF

APPROVED ONLY FOR

PILOT

DATE 11-8-71

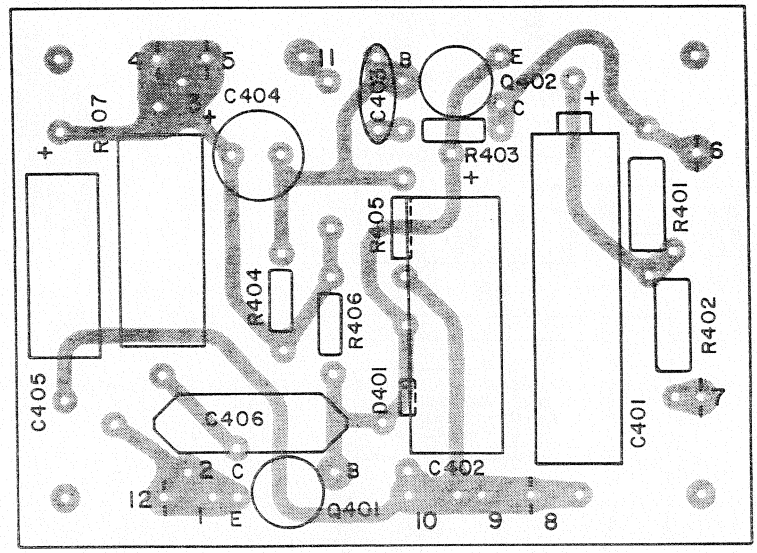
H H SCOTT, INC. MAYNARD MASS

CIRCUIT DIAGRAM

SIZE D DWG NO. 431-C1 REV 0

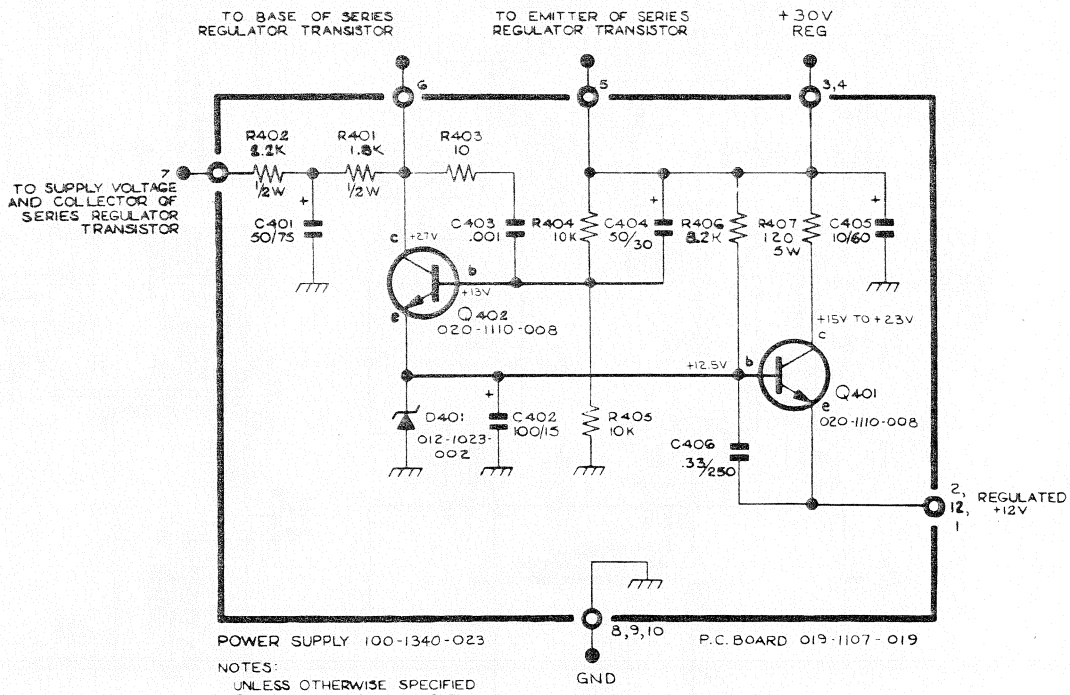
Q401 & Q402
020-1110-008

100-1340-020
CIRCUIT DIAGRAM 100-1340-021



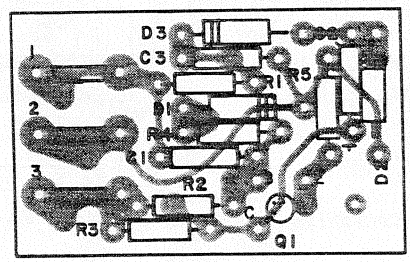
H.H.S POWER SUPPLY

019-1107-019 REV. 0

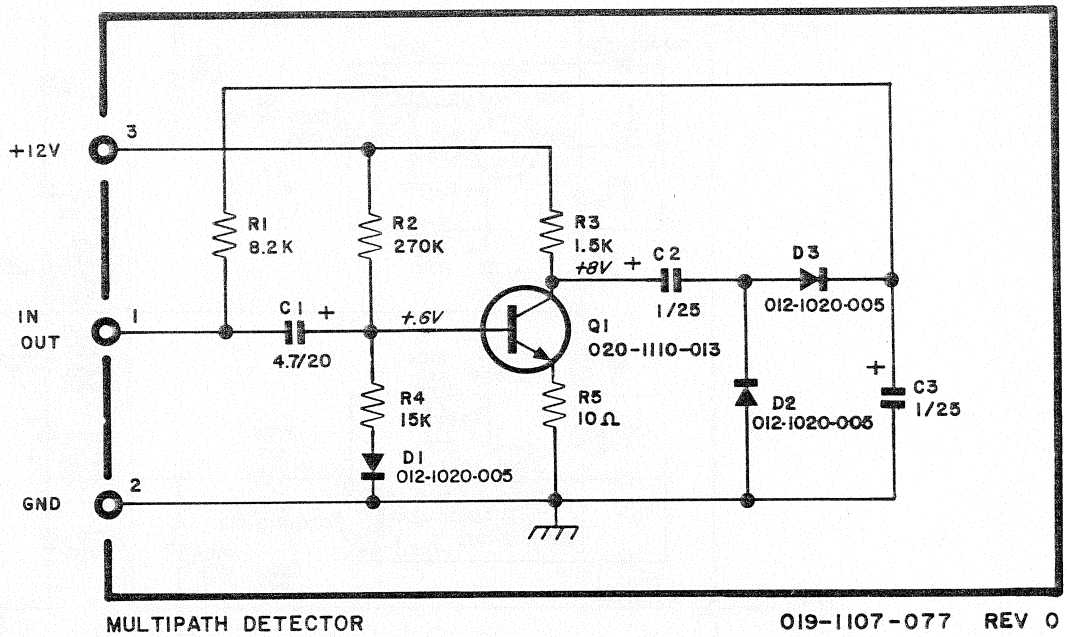


NOTES:
UNLESS OTHERWISE SPECIFIED
1. RESISTANCE IN OHMS ±10%
CAPAITANCE IN MFD'S
RESISTORS 1/4 WATT
2. UNLESS OTHERWISE SPECIFIED, ALL DC VOLTAGES POSITIVE ±15% MEASURED WITH 20 KΩ/V VOM AND 117 VAC LINE, 300 Ω LOAD ON ANTENNA TERMINALS, TUNER OFF STATION.

CIRCUIT DIAGRAM 100-1342-003
REV 0



MULTIPATH INDICATOR 019-1107-077
REV 0



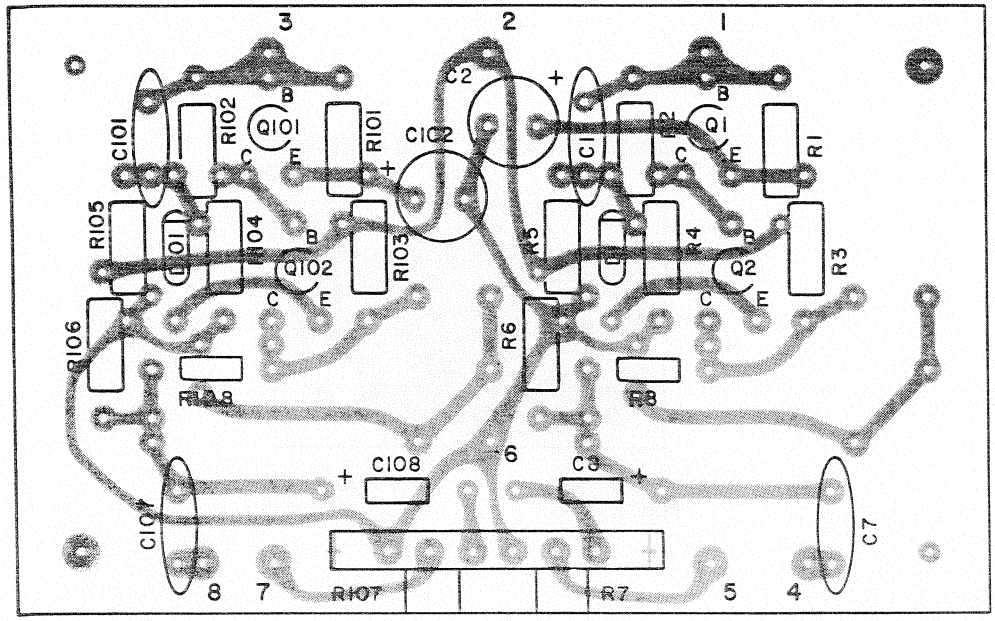
MULTIPATH DETECTOR 019-1107-077 REV 0

NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL RESISTANCE IN OHMS ± 10%, 1/4W.
   CAPACITANCE IN MICROFARADS
2. HIGHEST SERIES R5, C3, D3, Q1.
3. VOLTAGES MEASURED WITH 20KΩ/V VOM

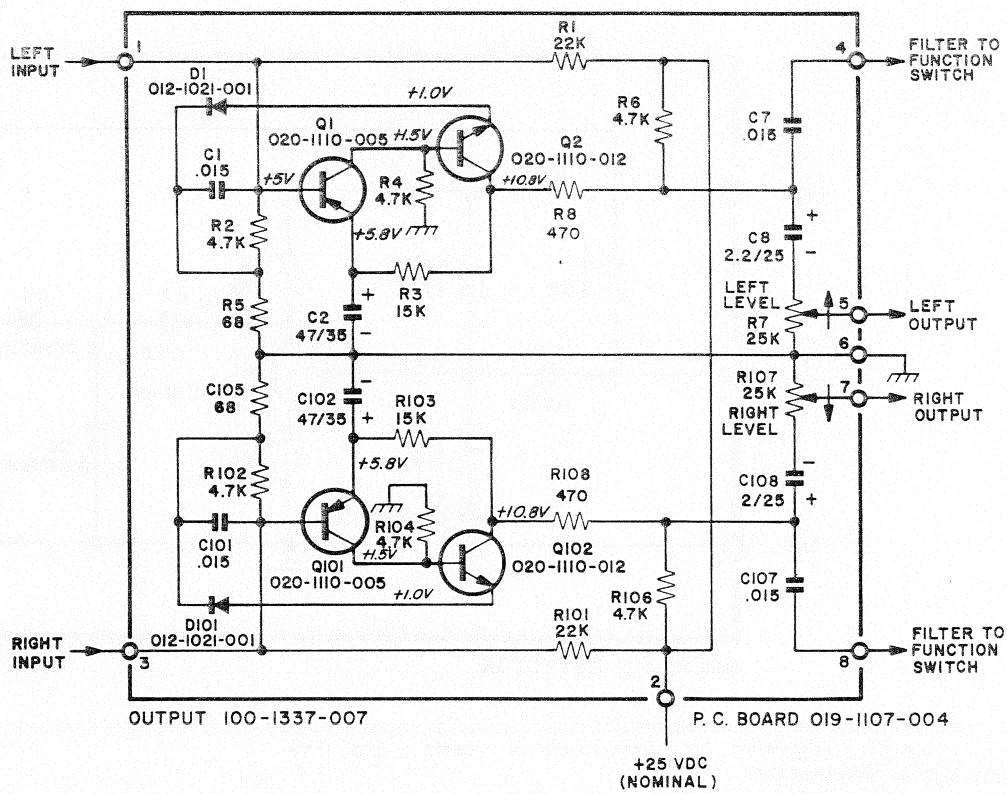
Q2,Q102; 020-1110-012
Q1,Q101; 020-1110-033

CIRCUIT DIAGRAM 100-1337-007



H.H.S OUTPUT

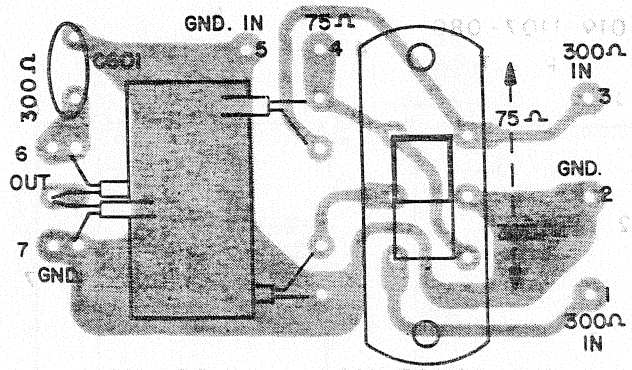
019-1107-004/A REV 1



NOTES:

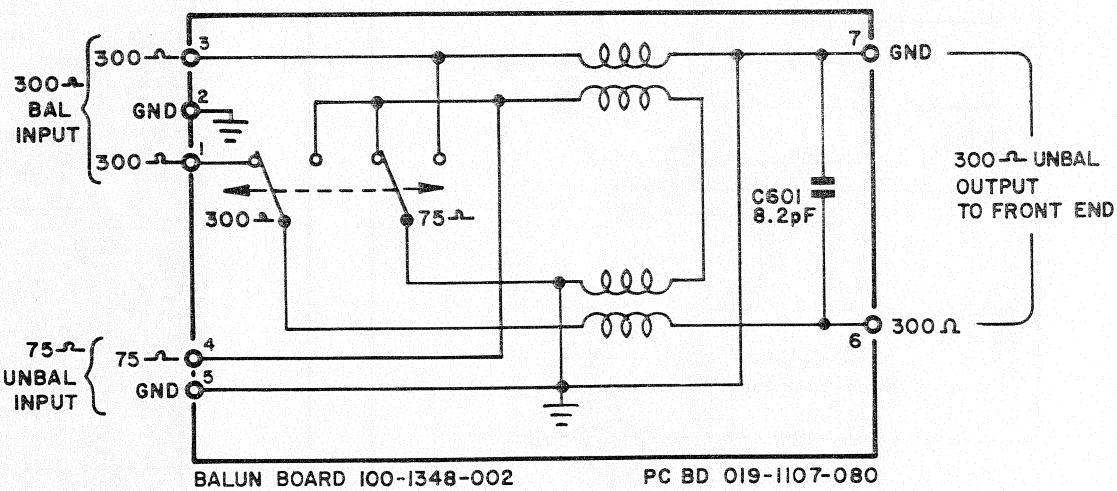
1. UNLESS OTHERWISE SPECIFIED RESISTANCE IN OHMS ±10%, 1/2 WATT, CAPACITANCE IN MFD'S
2. ARROWS ON POTENTIOMETERS INDICATE CW ROTATION
3. INDICATED SUPPLY VOLTAGES MAY VARY ABOVE OR BELOW NOMINAL VOLTAGES SHOWN FROM MODEL TO MODEL
4. ARROW-HEADS INDICATE MAIN SIGNAL PATH
5. HIGHEST SERIES NUMBERS C8,C108,D1,D101,Q2,Q102,R8,R108
6. COMPONENTS DELELTED; C3,C4,C5,C6,C103,C104,C105,C106, L1,L2,L101,L102

CIRCUIT DIAGRAM 100-1348-002



BALUN 019-1107-080 Rev. 1

REVISIONS			
SYM	DESCRIPTION	DATE	APPR
1	ECO 3530	11-25-70	

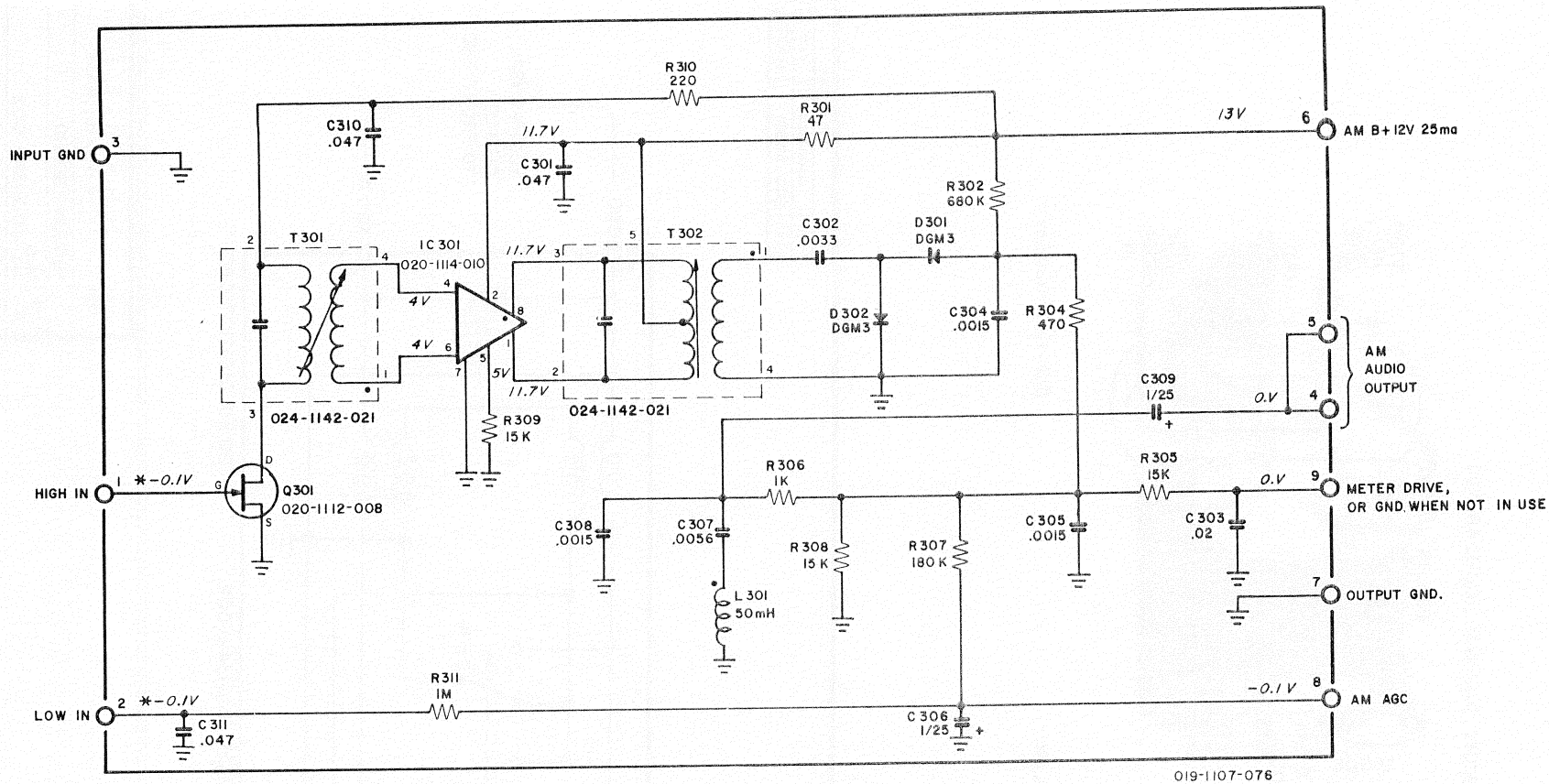


H.H.SCOTT, INC.
MAYNARD, MASS.

BALUN BOARD

SIZE	DWG. NO.	REV.
A	100-1348-002	1
ENG. DR	SHEET 1 OF 1	DATE 5/8/69

REVISIONS			
SYM	DESCRIPTION	DATE	APPR
1	ECO 3922	1-27-72	EMR



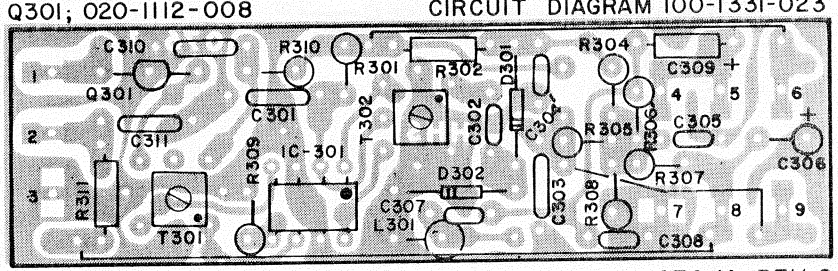
019-1107-076

NOTES:
1. UNLESS OTHERWISE SPECIFIED; RESISTANCE IN OHMS ±10% 1/4 WATT, AND CAPACITANCE IN MFD'S
2. IC 301 IS 020-1114-010, T 301 AND T 302 ARE 016-1093-024, Q 301 IS 020-1112-008
3. HIGHEST SERIES NUMBERS, C 311, R 311, L 301, IC 301, T 302, Q 301, D 302.
4. GREEN DOT ON TOP OF TRANSFORMER OR COIL CAN INDICATES PIN NO 1.
5. DOT ON TOP OR TIP ON SIDE OF IC INDICATES PIN NO. 8.
6. * HIGH INPUT IMPUT IMPEDANCE METER ONLY (10 MΩ OR HIGHER).
7. DOT ON CHOKE INDICATES START OF WINDING.
8. COMPONENTS DELETED; R303

REFER TO COMPONENT LABEL 019-1107-076/A

IC301; 020-1114-010
Q301; 020-1112-008

CIRCUIT DIAGRAM 100-1331-023



H.H.S. AM IF

019-1107-076/A REV. 0

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES	BMR 9/1/71	APPROVED FOR PRODUCTION			H.H.SCOTT, INC. MAYNARD, MASS.
TOLERANCES ON FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± 1/2°	DRAFT Zam	APPROVED ONLY FOR →	PILOT	EMR 4/19/71	AM IF STRIP
	CH		SAMPLE	EMR 4/19/71	SIZE C DWG NO 100-1331-023 REV 1
	ENG		QUOTE	BMR 9/10/71	SCALE SHEET 1 OF 1 DATE 5-6-71
	PROD				
	MATERIAL				
	FINISH				

Charrette 1498